ABSTRACT OF THE DISCLOSURE:

A control program for a co-processor in a video-on-demand system directs the co-processor to perform the steps of: a) obtain a transmission control list, from an external source, which identifies a group of several video data packets and a respective subgroup of internet protocol headers for each video data packet in the group; b) partition into pieces, each video data packet and its respective subgroup of internet protocol headers as identified by the transmission control list; and, c) send the partitioned pieces, along with an additional header for each piece, to an output port during a series of spaced apart time intervals.